### APPENDIX TO THE REPORT OF THE MINISTER OF AGRICULTURE

FOR 1894

# MECHANICAL

# MANUFACTURING INDUSTRIES

OF CANADA

BY GROUPS

## · SPECIAL REPORT ON THE CENSUS RETURNS

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#### APPENDIX TO THE REPORT OF THE MINISTER OF AGRICULTURE FOR 1894.

# CENSUS OF CANADA, 1891

# SPECIAL BULLETIN

## MECHANICAL AND MANUFACTURING INDUSTRIES

DEPARTMENT OF AGRICULTURE, OTTAWA, December, 1894.

This bulletin relates to the mechanical and manufacturing establishments of Canada.

Its object is to place the condition of those industries beyond honest cavil, by examining the attacks which have been made upon the results obtained from the statistics gathered by the census enumerators in the census taken in 1891. Those statistics, when compared with the returns of 1881, show the following results:—

minutes.	1881.	1891.	Jucrease.	
Number of establishments	49,722 \$164,957,423	75,968 \$354,620,750	26,246 \$189.663.327	
Number of employees. Wages paid Cost of raw material. Viglue of products.	254,894 \$59,401,702 \$179,929,193	370,256 8100,663,650 8256,119,642 8476,258,886	115,362 \$11,261,948 \$76,189,849 \$166,527,019	

These figures differ both in 1881 and in 1891 somewhat from those which have been previously published. The explanation is that the above statement is the result of a careful examination of the returns of the censuses of 1881 and 1891 for the purpose of grouping the mechanical and industrial establishments according to the value of their output. In some cases errors in addition were discovered; in other cases errors of omission were found. The close serutiny of each of the 125,690 industries was a work involving great labour, as each industry required 12 columns or about 1,500,000 entries in all. But it was deemed advisable to undertake the work, 1st, as giving to the public such a grouping of our industries as would enable them to see at once in what directions our industrial development was taking place, whether in the line of large industries or otherwise; 2nd, as giving to the public and our public men information which would enable them to see the defects, if any, of the system followed in Canada during three censusses with respect to our industrial establishments, and 3rd, as giving a solution of the question how best to improve the returns so as to remove the doubts of their value which have been visited after each census.

8d-11



In all eases the compilation has been made from the original sheets without reference to the results published in the 1881 report, or to the preliminary bulletins for 1891.

The basis of the grouping is the yearly output of the several establishments, being the value of the articles produced in the mechanical and manufacturing establishments of the country, as reported to the census enumerators by those to whom they applied for the information.

The divisions made were five in number. This grouping was decided on because it was considered that fewer divisions would not bring out the facts with sufficient clearness, while a greater number of divisions would increase unnecessarily the work of comnilation

The definition of an industrial establishment which has guided the enumerators in the three censuses taken under federal authority is : "An industrial establishment is any place where one or several persons are engaged in manufacturing, altering, making up or changing from one shape into another, materials for sale, use or consumption."

The object in view in all three consuses was to procure full statistics of the small, as

well as of the large, industries of the country.

Whether, when the industries are very small, they should be included in the compiled statement is a fair subject for discussion. In the censuses of 1881 and 1891 they were included, if the value of the articles produced amounted to \$50 in the year. Possibly the limit fixed in 1881 was too low, but as it was fixed at that figure it was not deemed advisable, in the absence of any legislative emotment, to raise the limit in the compilation of the statistics gathered in the census of 1891.

To meet the objection that might be, and has been, raised, that such very small industries, if taken, lead to misconception and tend to swell the number of industrial establishments without adding materially to the sum total of the output, the plan of grouping has been adouted.

The material is before each investigator. If he thinks that these small industries should not be included he has but to drop them both for 1881 and 1891 and he has the

four remaining groups to compare together.

No. 1 group includes all mechanical and manufacturing establishments whose output of articles produced was in the census years under \$2,000; No. 2, includes all whose yearly output was from \$2,000 to \$12,000; No. 3, all from \$12,000 to \$25,000; No. 4, all from \$25,000 to \$50,000, and No. 5, all having an annual output from \$50,000 and upwards.

#### BY GROUPS.

The results of the examination are given in the following summary :-

Group No. 1--Value of articles produced in Census year under \$2,000 \*\* \$12,000 to \$25,000, \*\* \$25,000 to \$50,000, \*\* \$50,000 and over.

1	18	81.	189	1.	Variation 1891	Per cent o
Group.	Cutput.	Per cent of total output.	Output.	Per cent of the	more than 1881.	
	8		8		8	
1	20,734,080	6:7	32,255,192	617	+11,521,112	+55.6
2	64,939,604 36,808,242	20:11	93,250,957 47,709,005	19:6	+ 28,321,353	+29.6
11	33,482,170	10.9	42,238,542	8.8	+8,756,372	+ 26 1
5	163,767,771	49.6	260,795,190	5418	+107,027,419	+ 69.6
Total.	309,731,807	100.0	476,258,886	1 100:0	+166,527,019	+53.7



A study of this table will show :

lst. That while group 1, (which contains all the smaller industries) has increased by 56 per cent in 1891 compared with 1881, it has not increased more rapidly in 1891 than it did in 1881 proportionately to the total output. In each census year group 1

formed 6.7 per cent of the total output.

If in order to swell the total the enumerators had "mked and scraped" together all the small industries, as they have been charged with doing, to a much greater extent than was done in the census of 1881, the result would be that the group comprising the small industries would have a larger proportion of the whole than it had in 1881. But the proportion is exactly the same. This is the best evidence possible that the enumerators of 1891 used equal diligence with those of 1881 in looking after the small industries. They were bound to do that. Had they been over zalous in the performance of their swort duty in 1891, as compared with the enumerators of 1881, such ultra zeal would have revealed itself in the analysis by groups.

The results shown in group No. 1, of 1891, prove beyond a perudventure that the enumerators, taken as a body, did their duty honestly and did no more than their duty.

The analysis by groups confirms the general conclusion deduced from the totals. In the census of 1891 the 75,968 mechanical and manufacturing establishments of the country are reported as having an output of \$470,259,856, which is an average of \$6,259 per establishment. In the census of 1881, the 49,722 establishments are reported as having an output of \$30,731,867 or \$6,228 per establishment.

If there had been an abnormally large increase in the number of very small industries taken in 1891, that increase would have shown itself in the reduction of the average per establishment for 1891 below the average of 1881. On the contrary the

average is higher.

2nd. The grouping brings out the fact that the greatest absolute and relative increase was in group 5. The increase in 1891 in this group was \$107,027,419 over the output of 1881 for the similar group. That increase is 64.2 per cent of the whole.

If the lowest standard of an industrial establishment is to be considered an output of \$50,000 a yer, then judged by that standard the people of Canada in the year 1890-91 provided themselves with manufactures to the value of \$250,785,190 against \$183,767,771 in the year 1880-81. That is, that for every \$100 worth of articles manufactured in Canada in 1880, the population only increasing in the same period by 12 per cent.

If the standard of industrial establishments is taken to be an annual output of \$2,000 and over, then in the year 1890-91 the people of Canada were supplied from the manufactories of Canada with \$444,003,094 worth of home manufactoried articles against \$288,997,878 worth of the same in 1880-81. This is an increase of \$155,005,907, or 537 per cent of an increase in the output of our manufactories in the

space of 10 years.

Thus it is shown conclusively that there has been a very great increase in the capacity to supply ourselves with manufactured articles from our own Canadian work-

shops.

If, now, to groups 2, 3, 4 and 5 be added the output of group 1, which constitutes only one-fifteenth of the total output as given in the census returns, analysis will show that the total output as given in the consus year 1890-91 was equal to \$98.54 per head of the population, an increase of \$26.91 per head as the measure of the development of manufacturing in Camada after ten years of effort in that direction. Take off the smaller industries, viz., group 1, and there remains an output of \$91.87 per head in 1890 and of \$66.60 per head in 1890, showing an increase of \$25.27 per head. This is a difference of \$1.64 between the per head output of 410 for groups in the census years 1890-91 and 1890-81 as compared with the per head output of four groups, No. 1 group being left out.

It is because of this \$1.64 in a total of \$26.91 that an outery has been raised against the results of the industrial census of 1891. It is not worth fighting over. Drop it out altogether and the increase of \$25.27 per head of the population is sufficient to prove that there has been a great development of our manufacturing capacity.



that the output of all classes of mechanical and manufacturing industries—leaving out for the purpose of the argument the smaller ones of group 1—has been remarkable.

It is no part of the duty of the writer to account for that increase or to set forth the dillifedities ensountered by those engaged in Canada in mechanical and manufacturing industries awing to their proximity to the more highly organized industries of the same kind in the United States. It is his duty to present the facts with such fulnessawered not be facts at all.

But to many persons a group containing a fair proportion of industries with an output close to \$2,000 a year would not be considered a group of small industries at all. That group contains the germ of future large mechanical and manufacturing industries. It is the most interesting of all the groups in that respect, and that there has been an increase so marked in this group is proof, ist, that the large industries have not crashed out the small ones, and 2nd, that the activity of the people in the manufacturing direction is on the increase; in other words, that it pays a constantly increasing number of persons engaged in solving the problem of living to turn to mechanical and manufacturing compactions.

These are good signs of healthy growth, and the diagnosis is confirmed by the fact that while in group 1, in 1881, the average output per establishment was 846 a per in 1891 it was 8535, an approximation so close as to show that nothing has occurred during the ten years to prevent the development of these smaller industries.

#### GROTTE FIVE.

Taking up the largest group, analysis gives the following results:

There were in 1891 in Canada 708 establishments having an annual output of from \$100,000 to \$500,000 and in 1881, 466. Of those with a yearly output from \$500,000 to \$1,000,000 there were 49 in 1891 and 24 in 1881. Those with an annual output of over \$1,000,000 numbered 19 in 1891 and 10 in 1881.

The following table gives the number and province, being analysis of group 5:-

1	1 :	3		3	4	
Province.	ments, v		Establic baying a of \$50 \$100	n ontput	Establis having a of \$100,	nontput 000 and
British Columbia.  Manitota.  New Brunswick  Now Scotia.  Ontario  Quebeo.	17 82 47 568 4 377	1891. 59 39 87 83 916 5 479	1881. 9 - 12 50 30 316 4 187	1891. 41 23 49 52 493 4 233	1881. 4 5 32 17 252 190	1891. 18 16 38 31 423 1 246
Territories	-	1,675	608	899	200	776

Further analysis has been made of column 4, by subdividing it into establishments having an output from \$100,000 to \$200,000, \$200,000 to \$300,000, and so on to establishments having an output of \$1.000,000 and over \$1.000,000 and over \$1.000,000 and over \$1.000,000 and over \$1.000,000 and \$1.000,000 and

The results cannot be published by provinces owing to the fact that in several cases
there is in a province but more establishment having the output within the designated
range. To publish the fact in such cases would be to reveal with more or less distinct-

,



ness the identity of the establishment. The results can, however, be given for Canada. They are as under:

Establishments having an output of :

				-	1	1881. 189
8 100.0	ю	to	8 200,000	ich		329 479
200,00	0	. **	300,000			86 133
300,00			400,000			33 7
400,00	00	**	500,000			18 2
500,0		**	600,000			14 2
600.0	00	**	700,000			7 1
700,00	10	**	1,000,000			3 1
1,000.00	0 :	and	over			10 19
.,,			m 1		-	

Tetal establishments having an output from \$100,000 to \$1,000,000 and over. 500

The increase in the number of these large establishments is 276 or 55.2 per cent against the increase of 52.1 per cent, which is the increase of all the establishments taken in the census of 1891 over the total number taken in the census of 1881.

#### ANALYSIS FOR ONTARIO.

An analysis of the province of Ontario shows that Eastern Ontario (including in that designation Renfrew, Ottawa city, Present, Glengury, Cornwall and Stomons, Russell, Carleton, Dundas, Grenville South, Leets, Lanark, Frontenae, Brockville, Addington, Prime Edward, Lemox, Hastings, Kingston, Peterbosongh and Northumberland) and 37 establishments with an output of from \$100,000 to \$500,000, and two with an output of \$500,000 to \$500,000, and two with 70 establishments with an output of \$100,000 to \$500,000, 10 with an output from balf a million of a million, and one with an output of or a million, and one with an output of \$100,000 to \$500,000, 10 with an output from balf a million to a million, and one with an output of over a million deliance.

In Central Ontario, comprising Nipissing, Muskoka, Victoria, Ducham, Ontario, Simeoc, York, Cardwell, Toronto and Peel, there were 75 establishments having an annual output of from \$100,000 to \$500,000 in 1831, and 132 establishments having an output of the same range in 1891. In 1881 there were four with an output of from half a million to one million dollars a year, and in 1891 the number was the same, 4; in 1881 there were no establishments having an output beyond the million dollar mark and in 1891 the bure were two.

In Western Ontario, comprising all the remainder of the province there were 128 establishments in 1881, and 170 in 1891, with an output from \$100,000 to \$500,000; four in 1881, and 12 in 1891, with an output from half a million to one million; two in 1881 and two in 1891 went beyond the million dollar mark.

Of those which in the province of Ontario went beyond the one million dollar output, the aggregate was \$2,200,000 in 1881, and \$6,175,000 in 1891.

The number of establishments in the province of Ontario having an output of a from \$100,000 to \$500,000 increased by 152 which is 625 per cent of an increase. The increase in the number of establishments having an output from half a million to one million was 160 per cent and of those beyond the million, mark, \$150 per cent.

#### ANALYSIS FOR QUEBEC.

In the province of Quebec, Montreal and Hochelaga are the great centres of the large manufacturing establishments.

of \$100,000 to \$500,000; 13 with an output from half a million to one million, and six with an output of one million and over.

In 1891 the 171 establishments had increased to 219, the 13 to 16 and the six to 11.

In 1891, 92 of the establishments with an output of \$100,000 to \$500,000 were outside of Montreal and Hochelaga. In 1881 there were 69 of these establishments



outside of these two electoral districts. Thus 42 per cent of these establishments were outside of Montreal and Hochelaga in 1891, and 40 per cent in 1881. So that the outside districts have slightly gained on the manufacturing centre in respect to these establishments. Of industrial establishments with an output of half a million to one million the outside districts had 31 per cent in 1891 against 39 per cent in 1881, and of industrial establishments with one million and over of an output Montreal and Hochelaga had them all in 1891, while in 1881 one out of the six was outside of the two districts.

Taking the whole province the increase in the number of establishments with an output from \$100,000 to \$500,000 was 28 per cent. The increase in the number of those with an output of half a million dollars to one million dollars was 23 per cent, and of those having an output of a million dollars and over, 83 per cent. The increase of these three classes in Montreal and Hochelaga was 24.5 per cent, 37 per cent and 120 per cent respectively.

Of the establishments in the province of Quebec which went beyond the one million dollar mark the aggregate in 1881 was \$12,263,159, and in 1891 the aggregate was \$28,416,504.

Of the 19 establishments in Canada having in 1891 over a million dollars of an

output, 11 are in the province of Quebec and 5 in the province of Ontario. Of the 9 establishments which in 1881 had an output of over one million dollars 6 were in the province of Quebec and 2 in the province of Ontario.

The total output of the 19 establishments in 1891 was, \$38,769,004; the 9 establishments in 1881 had an output of \$17,290,159.

The proportion which the output of these establishments here to the total output of all the industrial and mechanical establishments was in 1891, 8.1 per cent, and in 1881, 5.6 per cent.

It has been calculated that the output of the farms of Canada, allowing an average of 25 cents a day as the cost of farm products consumed by each person in Canada plus the exports of the produce of the farm, is equal to \$500,000,000 a year. The output from the mechanical and manufacturing establishment is valued at \$476,260,000.

The farmers numbered 408,738 in 1891 and, therefore, the average farmer con-

tributed to the state the sum of \$1,223 a year.

The number of establishments in 1891 was 75,968. Thus the mechanical and manufacturing establishments contributed to the State as their share towards the aggregate product of the country the sum of \$6,000 a year.

The total number of hands employed in these mechanical and manufacturing establishments was 370,250. So that the share of each employee in the aggregated products is \$1,275, or somewhat more than each farmer's share, in the sum total of the aggregate products of the farm.

#### CONCLUSION.

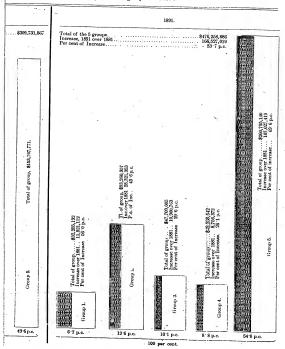
The conclusions derived from the statistics are:

- That all the groups show a very considerable increase in 1891 over 1881. 2. That all the provinces have participated in this development of industrial
- occupations 3. That during the ten years there has been a great increase in the number and in the output of the large industrial establishments.
- 4. That the small industrial establishments have not been affected injuriously by the development of the large establishments.
- 5. That while the group containing the small industries increased their output as a group in 1891, yet that relatively to the whole this group occupies exactly the same position the similar group did in 1881.
- 6. That, therefore, the statement that the output for 1891 was inordinately and abnormally increased by bringing into the census of manufacturing and mechanical establishments a greater proportionate number of the very small establishments than were included in the census of 1881 lacks the essential element of truth.

GEORGE JOHNSON,



d with a similar group in 1881. This is shown by the shaded part of the columns of 1891. Thus output of 56 per cent more than the output of group 1 of 1881. The length shows the proportion of that census. The width in 1891 (shaded lines) shows the growth in each group compared with 1. It is also wider. These facts mean that the large industries of the country had an output in and showed an increase of 69-6 per cent on group 5 of 1881:—





#### STATISTICS.

# The following are statistical details with percentages worked out:

## GROUP No. 1.

Province.	Number of . Establish- ments.	Capital Invested.	Number of Em- ployees.	Wages Paid.	Raw Material Used.	Value of Output.
1591.	2	8		8	8	s
British Columbia. Manitoba Now Brunswick Nova Scotia Ontario Princo Edward Island. Quelec. North-west Turritories. Total.	4,017 8,383 18,676 2,213 16,505	191,547 250,345 1,265,107 2,334,197 10,846,427 775,663 9,747,444 135,878	322 576 6,764 12,136 26,964 3,461 28,896 257	70,670 144,991 821,433 1,518,298 4,492,026 439,457 3,507,556 52,653 11,038,084	62,884 102,966 714,212 1,467,991 4,722,677 377,736 3,567,634 54,938	186,513 362,655 2,077,593 4,312,637 14,137,328 1,169,840 9,856,703 151,923
•						
Per cent of grand total	66.8	7.2	20.01	11.0	4.3	6.8
PERCENTAGE OF EA	CH COLUMN	IN GROUP 1	of 1891 To 7	COTAL OF EAC	PROVINCE.	
British Columbia. Manitoba New Branswick Nova Scotia. Ontario Prince Edward Island. Quebec North west Territories.	72.0	1 4 8 6 11 8 6 1 26 6 8 2 7 9	2:8 13:1 25:4 34:7 16:2 43:8 20:4 23:8	2:0 7:6 13:8 21:0 9:0 39:0 11:4 12:4	1.2 1.8 6.0 9.1 3.7 18.0 4.2 6.5	1.6 3.6 8.7 13.9 6.0 27.0 6.4 8.3
Province.	Number of Establish- ments.	Capital Invested.	Number of Em- ployees.	Wages Paid.	Raw Material Used.	Value of Output.
1881.		s		8	8	8
British Columbia.  Manitoba  New Brunswick  Nova Scotia.  Ontarrio  Prince Edward Island.  Quebec  North-west Territories.  Total	196 142 1,986 4,229 13,054 1,250 11,206 9 32,072	148,335 53,051 688,122 1,366,606 6,455,357 488,228 3,758,283 6,200	228 225 3,762 6,924 22,367 2,080 17,802 14 53,501	-54,564 35,889 447,098 819,909 3,803,961 264,053 1,954,119 4,165 7,383,758	49,247 32,863 502,204 965,035 3,938,913 296,793 2,628,549 2,320 8,415,924	147,842 89,457 1,167,001 2,189,629 10,166,278 687,206 6,276,837 9,830 20,734,080
Per cent of grand total	64.2	7.9	21.0	12.4	4.7	6.7
Percentage of Ba	CH COLUMN	IN GROUP 1	of 1881 to '	TOTAL OF EACH	PROVINCE.	
British Columbia. Manitoba New Brunswick Nova Scotia. Outurio. Prince Edward Island. Queluc. North-west Territories.	47-2 41-3 66-0 77-0 56-6 77-3	5:0 3:8 8:2 13:4 8:0 23:0 6:5 6:0		5·9 4·7 11·6, 20·0 12·4 32·7 10·7 11·7	3:9 2:0 4:5 9:6 4:3 16:2 4:2 2:9	5:1 2:6 6:3 11:8 6:4 20:2 6:0 5:0



GROUP No. 2.

Province,	Number of Establishments.	Canital	Number of Em- ployees.	Wages Paid.	Raw Material Used,	Value of Output.
British Columbia. Manitola New Brunswick Nova Scotia. Ontario. Prince Kdward Island. Queboe. North-west Territories.	307 417 1,130 1,741 10,454 420 5,012 148	8 1,517,669 1,308,031 3,060,430 4,433,603 31,167,224 1,252,030 16,714,569 664,831	1,137 1,472 7,878 10,566 45,523 3,542 21,779 446	\$ 500,466 583,866 1,522,124 2,126,432 12,327,018 445,038 5,270,473 181,862	8 065,096 840,819 2,473,853 3,563,980 22,877,359 946,729 11,944,956 200,279	8 1,695,095 2,158,825 5,375,14 7,884,689 50,139,644 1,895,700 23,451,830 650,032
Total	19,629	60,178,387	92,343	22,963,579	43,572,071	93,260,957
er cent of grand total	25.8	17:0	24:9	22.8	17:0	19.6

# PERCENTAGE OF EACH COLUMN IN GROUP 2 of 1891 to TOTAL OF EACH PROVINCE.

British Columbia. Manitoba Manitoba New Brunswick Nova Scotia. Ontario. Ortario. Princo Edward Island. Quobec North-west Territories.	10°5 23°0 19°3 22°7 17°7 43°0 14°1 38°8	9:9 33:4 29:5 30:2 27:4 44:8 18:5 41:2	14°1 30°6 25°5 29°4 24°8 40°4 17°2 42°8	13:0 14:8 19:8 22:1 17:8 45:3 13:9 30:6	14:1 21:3 29:5 25:4 20:9 43:6 15:3 36:1

Province.	Number of Establish- ments.	Capital Invested.	Number of Em- ployees.	Wages Paid,	Raw Material Used.	Value of Output.
Inst. British Columbia		8		8	8	8
Manitola New Brunswick Now Scottia Ontario Trince Edward Island, Quelec North-west Territories.	133 - 732 1,022 7,746	476,680 367,430 1,648,121 2,249,997 19,550,634 871,198 8,488,634 8,300	687 580 5,161 6,044 87,623 2,462 15,681 20	229,766 215,455 882,254 1,190,585 9,292,445 340,196 3,080,559 9,880	324,525 310,818 1,734,168 2,408,328 18,933,355 842,812 9,469,356 19,936	756,478 090,890 3,367,963 4,751,006 37,258,330 4,522,450 16,549,411 43,059
	15,514	33,660,394	68,208	15,211,140	34,043,298	64,939,604
Per cent of grand total	27:2	20.4	26.8	25.6	18-9	20.9

# Percentage of each Column in Group 2 of 1881 to Total of each Province

British Columbia.  Manitoha New Brunswick Nova Social Ontario Prince Edward Island. Quichec North-west Territories.	38:8	16:2	22-3	24.7	25.5	25 8
	38:7	26:5	30-2	28.5	16.1	20 2
	24:4	19:6	25-9	22.8	15.7	18 2
	18:6	22:1	29-6	29.0	24.0	25 5
	33:6	24:2	31-8	30.3	20.8	23 6
	19:8	42:0	42-7	42.1	.3.1	44 7
	21:5	14:4	18-3	16.6	15.1	15 8
	41:7	8:0	24-1	27.9	25.0	21 9

GROUP No. 3.

			2.0. 0.			
Province.	Number of Establish ments.	Capital Invested.	Number of Em- ployees.	Wages Paid.	Raw Material Used.	Value, of Output,
1891.		8		8	8	8
British Columbia Manitola New Brunswick Nova Scotia Outario Prince Edward Island (Judece Rogin west Territories	. 83 144 208 1.453 31 640 9	1,749,090 651,052 1,766,044 2,141,939 16,042,236 465,170 8,698,475 172,000	775 2,857 3,758 17,301 566 9,135 62	598,255 336,004 721,851 939,451 5,545,192 127,325 2,547,236 37,200	\$38,809 736,050 1,209,870 1,737,358 13,242,874 215,902 5,874,915 69,300	1,970,933 1,479,62: 2,598,12: 3,663,496 25,825,345 485,376 11,526,215 159,906
Total	2,679	31,596,006	36,118	10,852,514	23,925,078	47,709,000
Per cent of grand total	3.2	8-9	9-8	10.8	9-3	10.0
Percentage of	racu Col	UNN IN GRO	ur 3 or 18	91 to Topal	ог клен Гке	OVINGE.
British Columbia. Manitoba New Brunswick. Nova Scottin Ontario Prince Edward Island. Quebec North-west Territories.	8:1 2:6 2:0 4:5 1:2	12:1 11:4 11:2 10:8 9:1 15:9 7:3 10:0	14·5 17·6 10·7 10·7 10·4 7·1 7·8 5·7	16:5 17:6 12:1 13:0 11:1 11:6 8:3 8:7	16°4 13°1 9°7 10°8 10°3 10°3 6°9 8°0	16:4 14:6 10:9 11:8 10:8 11:1 7:5 8:7
Province.	Number of Establish- ments.	Capital. Invested.	Number of Em- ployees.	Wages. Paid.	Raw Material. Usial.	Value of Ontput,
INNI.	s	s	8	s	8	\$
British Colmubia. Manitoba New Brunswick. News Scotia. Outstrior. Prince Edward Island. Quebec. Vorth, west, Territories.  Total.	35 32 135 131 1,168 36 522 2	556,420 239,600 1,055,715 944,299 9,384,438 464,600 4,563,393 20,000	300 400 2,493 2,333 13,998 817 6,920 12	160,048 142,973 513,640 514,695 3,877,109 146,879 1,537,203 6,580	300,244 309,140 1,308,755 1,200,155 12,395,475 380,515 5,310,195 18,121	621,964 662,510 2,395,410 2,330,347 20,784,727 670,043 9,369,190 34,051
	2,061	17,228,465	27,273	6,899,127	21,222,600	36,805,242
Per cent of grand total	411	10.4	10.7	11.6	11.8	11.9

#### Percentage of each Column in Group 3 of 1881 to Total of each Province

British Columbia. Manitoba Manitoba New Brunswick. Nova Scotia Ontario Prince Edward Island. [Guelec North-west Territorics.	8:4 9:3 4:5 2:4 5:0 2:2 3:3 8:4	18:9 17:3 12:5 9:3 11:6 22:4 7:7 19:1	10°5 20°8 12°5 11°4 11°8 14°1 8°1 14°5	17-2 18-9 13-3 12-6 12-7 18-2 8-4 18-6	23.6 16.1 11.8 12.0 13.6 20.8 8.5	21 : 17 : 12 : 12 : 12 : 13 : 13 : 19 : 17 : 17 : 17 : 17 : 17 : 17 : 17



GROUP No. 4.

Province.	Number of Establish- ments.	Capital Invested.	Number of Em- ployees.	Wages Paid.	Raw Material Used	Value of Ontput,
1891.		8		8	8	8
British Columbia Manitoba New Brunswick Nova Scotia Dulario Finica Edward Island Duobee North-west Territories Total	36 51 81 652 10	1,865,347 585,548 1,266,835 2,413,448 14,761,568 281,559 8,568,506 410,040 30,152,282	2,386 652 1,560 2,279 12,764 248 8,240 200 28,339	624,650 285,833 502,856 659,597 4,321,042 67,990 2,432,015 81,040 8,966,833	846,523 710,287 849,355 1,353,987 12,548,876 208,700 5,485,235 137,500 22,000,403	2,145,466 1,365,378 1,803,398 2,720,656 22,727,841 349,006 10,828,816 298,006 42,238,649
er cent of grand total	1.6	8.9	7.7	8.9	8.6	8.1

British Columbia. Manitoba Manitoba Now Brunswick. Nova Scotia Ontario Prince Edward Island. Quebec North-west Territories.	3.5 0.9 0.8 2.0 0.4	12:9 10:3 8:0 12:2 8:4 9:7 7:2 24:0	20-9 14-8 5-8 6-5 7-7 3-1 7-0 18-5	17-4 15-0 8-4 9-0 8-7 6-2 7-9 19-1	16°5 12°5 6°8 8°4 9°8 9°9 6°3 16°2	17-9 13-4 7-6 8-8 9-5 8-0 7-1 16-3
Province.	Number of Establish- ments.	Capital Invested.	Number of Em- ployees.	Wages Paul.	Raw Material Used.	Value of Output:
1881.		s		8	8	8
British Columbia. Manitolia New Brunswick. Nova Scotia. Ontario. Prince Edward Island. Quelse North-west Terribaries. Total	64 534 7	370,000 203,250 1,249,470 871,165 8,066,828 69,950 5,242,006 70,000	586 338 2,575 1,986 10,182 328 6,354 37 22,386	117,035 152,830 565,092 526,843 2,991,689 43,780 1,530,782 14,800 5,942,881	198,500 421,700 1,360,140 1,137,317 11,236,087 117,090 5,375,627 39,374	373,500 708,969 2,429,436 2,217,282 18,457,773 259,500 8,933,721 108,998 33,482,170
Per cent of grand total	3-0	9.8	8.8	10.1	11.0	10-8

#### PERCENTAGE OF EACH COLUMN IN GROUP 4 OF 1881 TO TOTAL OF EACH PROVINCE.

British Columbia	2.4	6.12-6	20.5	12.6	15:6	1218
Manitoba	5.8	14:7	17:6	20.2	21.9	20.8
New Brunswick.	2:3	14.8	12 9	14:6	12.3	13:1
Nova Scotia	1.21	8:6	9.7	12.9	11:3	11.9
Ontario	2.3	10.0	8.6	9.8	12:3	11.7
Prince Edward Island	0.4	3:4	5-7	5/4	6:4	7:6
Quebre	1:6	8.8	1.714	8:4	8.6	8:5
North-west Territories	12:5	67 0	44.6	41.8	4914	55:6

#### GROUP No. 5.

Provinces.	Number of Establish- ments.	Capital Invested.	Number of Em- ployees.	Wages Paid	Raw Material Used.	Value of Output.
1801.		s		8	8 .	8
British Columbia. Manitoha New Brunswick Nova Scotia Outario Prince-Edward Island, Quelser. North-west Turritories	87	9,080,741 2,889,261 8,463,939 8,438,799 103,154,626 137,550 74,652,121 330,430	5,988 928 7,616 6,226 63,774 93 54,339 116	1,786,856 555,287 2,402,350 2,005,833 23,047,181 30,900 16,941,835 72,398	2,705,946 3,298,029 7,254,163 7,975,913 74,750,585 343,000 58,807,856 325,000	6,001,92; 4,788,700 11,995,300 12,461,92; 126,951,771 446,000 97,592,019 557,450
Total	1,675	207,147,467	139,080	46,842,640	155,460,492	260,795,190
Per cent of grand total	2.3	58 4	. 37:5	46.2	60.4	54.8
Percentage (	of Rach Co.	LUMN IN GROU	r 5 or 1891	го Тота <b>г</b> ог	EACH PROVI	NCE.
British Columbia. Manitoba New Brunswick Nova Scotia Ontario Princs Edward Island. Onchee. North-west Territories	7:7 3:8 1:6 0:8 2:8 0:2 2:1 1:8	63:1 50:8 53:5 42:7 58:6 4:7 63:1 19:3	52:0 21:0 28:6 18:0 38:3 1:2 46:3 10:7	49·8 29·1 40·2 27·7 46·3 2·8 55·2 17·0	52:8 57:9 58:0 49:5 58:3 16:4 68:6 38:4	50.0 47.2 50.3 40.1 53.0 10.2 63.7 30.5
Province.	Number of Establish- ments,	Capital Invested.	Number of Em- ployees.	Wages Pages.	Raw Material Useal.	Value of Output,
, INNE.		8		s	ś	8
British Celumbia.  Manifola New Brunswick Nova Squtia Ontario Prince Edward Island. Oneberg. North-west Territories	13 17 82 47 568 4 377	1,395,000 520,000 3,783,854 4,750,933 37,255,090 181,500 37,075,276	1,110 378 5,931 3,103 34,107 71 38,826	367,400 208,360 1,457,927 1,046,413 10,652,157 12,300 10,220,299	401,300 859,300 6,155,575 4,311,195 44,670,926 192,000 39,780,240	1,027,000 1,321,200 9,159,858 7,087,062 71,378,552 261,000 63,533,000
Total	1,108	84,961,653	83,526	23,964,796	96,361,536	153,767,771
Per cent of grand total	2.2	51.5	32.7	40-3	53.6	49.6
Percentage o	F KACH COL	UMN IN GROU	r 5 or 1881	TO TOTAL OF	RACH PROVI	NCE.
British Columbia.  Manifola New Brunswick Now Scotia.  Dutario Prince [Sdward Island, Quelse) Northwart Territories	3:1 4:9 2:7 0:8 2:5 0:9 2:4	47:3 37:6 44:9 46:7 46:2 8:7 62:7	38:8 19:7 29:8 15:2 28:8 1:2 45:3	39-6 27-6 37-7 25-5 34-8 1-5 55-7	31:5 44:2 55:7 43:0 49:0 10:5 63:6	35°1 38°7 49°5 38°2 45°2 7°7 60°7



The following is a further analysis of the table on page 4 and gives the details by provinces.

#### OUTPUT.

Ontput.	Percentage of Total of Pro- vinces.	Province.	Output. 8	Percentage of Total of Pro- vinces.	Variation, 1891 with 1881	Percentage of Variation.
1881.		British Columbia.	1811.			
147,842 756,478 621,964 373,500 1,027,000	5·0 25·8 21·3 12·8 35·1	Group 1	186,513 1,695,097 1,970,933 2,145,460 6,001,925	1.6 14.1 16.4 17.9 50.0	+ 38,671 + 938,619 + 1,348,969 + 1,771,960 + 4,974,925	+ 26°1 + 124°0 + 215°2 + 474°4 + 484°4
2,926,784	100.0	Totals	11,999,928	100.0	+ 9,073,144	+ 310.0
		Manitoba.				
89,457 690,899 602,510 708,960 1,321,200	2·6 20·2 17·7 20·8 38·7	Group 1	302,655 2,158,822 1,479,622 1,365,378 4,788,705	3°5 21°3 14°5 13°5 47°2	+ 273,198 + 1,467,923 + 877,112 + 656,418 + 3,467,505	+ 305 3 + 212 4 + 145 5 + 92 5 + 263 4
3,413,026	100.0	Totals	10,155,182	100.0	+ 6,742,156	19715
		New Brunswick.				
1,167,001 3,367,953 2,395,410 2,422,436 9,159,858	6:4 18:3 12:9 13:1 49:3	Group 1	2,077,593 5,375,144 2,598,125 1,803,398 11,995,395	8:7 22:5 10:9 7.6 50:3	+ 910,592 + 2,007,191 + 202,715 - 619,088 + 2,835,507	+ 7810 + 59.6 + 815 - 2516 + 3019
18,512,658	100.0	Totals	23,849,655	100.0	+ 5,336,997	4 2818
		Nora Scotia.				
2,189,629 4,751,006 2,330,317 2,217,282 7,087,062 18,575,326	11 '8 25 '5 12 '6 11 '9 38 '2	Group 1 do 2 do 3 do 4 do 5  Totals.	4,312,637 7,884,688 3,663,496 2,726,650 12,461,921 31,043,392	13:9 25:4 11:8 8:8 40:1	+ 2,123,008 ; 3,133,682 + 1,333,149 + 503,368 + 5,374,859 + 12,468,066	+ 67°2 + 67°2 + 22°7 + 75°8
10,166,278 37,258,339 20,784,727 18,457,773 71,378,552	6·5 23·6 13·2 11·5 45·2	Ontario.  Group 1	14,137,328 50,139,644 25,825,342 22,727,841 126,951,771	5°8 20°9 10°8 9°5 53°0	+ 3,971,050 + 12,881,365 + 5,040,615 + 4,270,068 + 55,573,219	+ 39:1 + 34:6 + 24:1 + 23:1 + 77:8
158,045,669	100:0	Totals	239,781,926	100.0	+ 81,736,267	+ 51:7
687,206 1,522,459 670,043 259,500 261,000	20:3 44:7 19:7 7:6 7:7	Prince Edward Island, Group 1 do 2 do 3 do 4 do 4	1,169,840 1,895,700 485,370 3 0,000 -46,000	26:9 43:5 11:1 8:3 10:2	+ 482,634 + 373,241 - 184,673 + 89,500 + 185,000	+ 70°2 + 24°5 - 27°5 + 31°5 + 70°8
3,400,208	100.0	Totals	4,345,910	100.0	+ 945,792	+ 27 .

<sup>+1891</sup> over 1881. --1891 under 1881.



Output. 8	Percentage of Total of Pro- vinces.	Province.	Output. 8	Percentage of Total of Pro- vinces.	Variation, 1891 with 1881. 8	Percentage of Variation.
1881.		Quebes.	1891.			
6,276,837 36,549,411 9,369,190 8,933,721 63,533,099	6:0 15:8 8:9 8:6 60:7	Group 1	9,856,703 23,451,830 11,526,217 10,828,815 97,592,018	6:4 15:3 7:6 7:0 63:7	+ 3,579,866 + 6,902,419 + 2,157,027 + 1,895,094 + 34,058,919	+ 57 0 + 41 1 + 23 0 + 21 1 + 53 0
104,662,258	100.0	Totals	163,255,583	100.0	+ 48,593,325	+ 461
9,830 43,059 34,651 108,998	5°0 22°0 17°4 55°6	North-west Territories.  Group 1.  do 2.  do 3.  do 4.  do 5.  Totals.	151,923 660,032 159,900 298,000 557,456	8:3 36:1 8:7 16:4 30:5	+ 142,093 + 616,973 + 125,849 + 189,092 + 507,455 + 1,631,372	+ 1,446 + 1,433 + 369 + 173 + 832 +
20,734,080 64,938,604 36,808,242 33,482,170 153, 77,771 309,731,867	6.7 20.9 11.9 10.9 49.6	Craada, Group 1 dn 2 do 3 do 4 do 5 Totals	32,255,192 93,260,957 47,709,005 42,238,542 260,716,190 476,258,886	6:7 19:6 10:1 8:8 54:8	+ 11,521,112 + 28,321,353 + 10,900,763 + 8,756,372 + 107,027,419 + 166,527,019	+ 55 + 43 + 43 + 20 + 26 + 60 + 53 5

<sup>+1891</sup> over 1881. -1891 under 1881.

